



# *COMMONWEALTH of VIRGINIA*

## *DEPARTMENT OF ENVIRONMENTAL QUALITY*

### NORTHERN REGIONAL OFFICE

13901 Crown Court, Woodbridge, Virginia 22193

(703) 583-3800 Fax (703) 583-3801

[www.deq.virginia.gov](http://www.deq.virginia.gov)

L. Preston Bryant, Jr.  
Secretary of Natural Resources

David K. Paylor  
Director

**STATE AIR POLLUTION CONTROL BOARD  
ENFORCEMENT ACTION - ORDER BY CONSENT  
ISSUED TO  
HOWARD HUGHES MEDICAL INSTITUTE  
FOR  
JANELIA FARM RESEARCH CAMPUS  
Registration No. 73280**

### **SECTION A: Purpose**

This is a Consent Order issued under the authority of Va. Code §§ 10.1-1309 and -1316, between the State Air Pollution Control Board and Howard Hughes Medical Institute, regarding Janelia Farm Research Campus, for the purpose of resolving certain violations of the Virginia Air Pollution Control Law, the Permit, and the regulations.

### **SECTION B: Definitions**

Unless the context clearly indicates otherwise, the following words and terms have the meaning assigned to them below:

1. "Board" means the State Air Pollution Control Board, a permanent citizens' board of the Commonwealth of Virginia, as described in Va. Code §§ 10.1-1184 and -1301.
2. "Department" or "DEQ" means the Department of Environmental Quality, an agency of the Commonwealth of Virginia, as described in Va. Code § 10.1-1183.
3. "Director" means the Director of the Department of Environmental Quality, as described in Va. Code § 10.1-1185.
4. "Facility" means the Howard Hughes Medical Institute, Janelia Farm Research Campus, located at 19710 Helix Drive in Loudoun County, Virginia.

5. "Howard Hughes" means Howard Hughes Medical Institute, a non-profit medical research organization and a "person" within the meaning of Va. Code § 10.1-1300.
6. "Notice of Violation" or "NOV" means a type of Notice of Alleged Violation under Va. Code § 10.1-1309.
7. "NRO" means the Northern Regional Office of DEQ, located in Woodbridge, Virginia.
8. "Order" means this document, also known as a "Consent Order" or "Order by Consent," a type of Special Order under the Virginia Air Pollution Control Law.
9. "Permit" means the New Source Review permit to operate and construct a medical research facility, which was issued under the Virginia Air Pollution Control Law and the Regulations to Howard Hughes Medical Institute on September 30, 2005.
10. "Regulations" or "Regulations for the Control and Abatement of Air Pollution" mean 9 VAC 5 chapters 10 through 80.
11. "Va. Code" means the Code of Virginia (1950), as amended.
12. "VAC" means the Virginia Administrative Code.
13. "Virginia Air Pollution Control Law" means Chapter 13 (§ 10.1-1300 *et seq.*) of Title 10.1 of the Va. Code.

#### **SECTION C: Findings of Fact and Conclusions of Law**

1. The Howard Hughes Medical Institute owns the medical research facility Janelia Farm Research Campus.
2. The Facility is the subject of the Permit which regulates, among other equipment, three Generac Generators and three Cleaver Brooks Boilers.
3. On March 20, 2009, Department staff conducted a Full Compliance Evaluation of the Facility for compliance with the requirements of the Virginia Air Pollution Control Law, the Permit, and the Regulations. Based on the inspection and a review of additional information provided by Howard Hughes, Department staff made the following observations:
  - a. The Generac generators did not appear to be connected to a natural gas fuel source and therefore the generators were not being operated in bi-fuel mode;
  - b. During the inspection, Howard Hughes personnel were unable to provide records of the following:
    1. annual hours of operation for the generators and boilers;
    2. monthly and yearly throughput of natural gas and/or propane for the boilers;
    3. the emissions calculations for the generators and boilers;

4. documents that demonstrated the generators were operated in bi-fuel mode;
    5. documentation of the date that the generators began operation and the date the generators were constructed.
  - c. The 12 month rolling combined total of hours of operation for the boilers indicated that there were 8 months out of 12 where the units appeared to operate over 4,300 hours.
4. Condition 3 of the Permit requires that "Nitrogen Oxide emissions from the... Generac Generators (Unit Reference #s G4-G6) shall be controlled by operating the generators in the bi-fuel mode only..."
5. Condition 7 of the Permit requires that "The combined hours of operation for the... Cleaver Brooks Boilers rated at 62 MMBtu/hr shall not exceed 4,300 hours per year... The hours of operation for each boiler shall be calculated monthly as the sum of each consecutive twelve month period."
6. Condition 8 of the Permit requires that "The approved fuel for the... Generac Generators (Unit Reference #s G4-G6) are diesel oil and natural gas used jointly in a bi-fuel mode as defined by the manufacturer..."
7. Condition 22 of the Permit requires that "The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit... These records shall include, but are not limited to:
  - (a) Annual hours of operation of generators...
  - (b) For each boiler, the monthly throughput of natural gas and/or propane...
  - (c) For each boiler, the yearly throughput of natural gas and/or propane...
  - (e) Monthly emissions calculations to demonstrate compliance...
  - (f) All documentation... to demonstrate that the three Generac Generators (Unit References #s G4-G6) were operated in bi-fuel mode only...These records shall be available for inspection by the DEQ and shall be current for the most recent five years."
8. Condition 23 of the Permit requires that "The permittee to furnish written notification to the RACM, NVRO at the address referenced in Condition 17:
  - (a) The actual date on which construction of each piece of equipment listed in Condition 2 commenced within thirty days after such date
  - (b) The anticipated start-up date ...
  - (c) The actual start-up date...The anticipated date of performance tests..."
9. On May 27, 2009, based on the inspection and follow-up information, the Department issued a Notice of Violation to Howard Hughes citing alleged violations of the aforementioned regulations and permit conditions as described in paragraphs C(4) through C(8).

10. On May 1, 2009, Howard Hughes submitted notification of startup for the generators, annual hours of operation of the generators and boilers, monthly and yearly fuel throughput for the boilers, and emissions calculations for the generators and boilers.
11. On July 7, 2009, Department staff met with representatives of Howard Hughes to discuss the alleged violations.
12. Based on the results of the inspection on March 20, 2009 and the documentation submitted on May 1, 2009, the Board concludes that Howard Hughes has violated Permit conditions 8, 3, 22, 23, and 7 as described in paragraphs C(4) through C(8), above.
13. Howard Hughes has submitted documentation that verifies that the violations described in paragraphs C(7) and C(8), above, have been corrected
14. In order for Howard Hughes to complete its return to compliance, DEQ staff and representatives of Howard Hughes have agreed to the Schedule of Compliance, which is incorporated as Appendix A of this Order.

#### **SECTION D: Agreement and Order**

Accordingly, by virtue of the authority granted it in Va. Code §§ 10.1-1309 and -1316, the Board orders Howard Hughes Medical Institute, and Howard Hughes Medical Institute agrees to:

1. Perform the actions described in Appendix A of this Order; and
2. Pay a civil charge of \$19,955.00 within 30 days of the effective date of the Order in settlement of the violations cited in this Order.

Payment shall be made by check, certified check, money order or cashier's check payable to the "Treasurer of Virginia," and delivered to:

Receipts Control  
Department of Environmental Quality  
Post Office Box 1104  
Richmond, Virginia 23218

Howard Hughes Medical Institute shall include its Federal Employer Identification Number (FEIN) with the civil charge payment and shall indicate that the payment is being made in accordance with the requirements of this Order for deposit into the Virginia Environmental Emergency Response Fund (VEERF).

#### **SECTION E: Administrative Provisions**

1. The Board may modify, rewrite, or amend this Order with the consent of Howard Hughes for good cause shown by Howard Hughes, or on its own motion pursuant to the Administrative Process Act, Va. Code § 2.2-4000 *et seq.*, after notice and opportunity to be heard.
2. This Order addresses and resolves only those violations specifically identified in Section C of this Order. This Order shall not preclude the Board or the Director from taking any action authorized by law, including but not limited to: (1) taking any action authorized by law regarding any additional, subsequent, or subsequently discovered violations; (2) seeking subsequent remediation of the facility; or (3) taking subsequent action to enforce the Order.
3. For purposes of this Order and subsequent actions with respect to this Order only, Howard Hughes admits the jurisdictional allegations, findings of fact, and conclusions of law contained herein.
4. Howard Hughes consents to venue in the Circuit Court of the City of Richmond for any civil action taken to enforce the terms of this Order.
5. Howard Hughes declares it has received fair and due process under the Administrative Process Act and the Virginia Air Pollution Control Law and it waives the right to any hearing or other administrative proceeding authorized or required by law or regulation, and to any judicial review of any issue of fact or law contained herein. Nothing herein shall be construed as a waiver of the right to any administrative proceeding for, or to judicial review of, any action taken by the Board to modify, rewrite, amend, or enforce this Order.
6. Failure by Howard Hughes to comply with any of the terms of this Order shall constitute a violation of an order of the Board. Nothing herein shall waive the initiation of appropriate enforcement actions or the issuance of additional orders as appropriate by the Board or the Director as a result of such violations. Nothing herein shall affect appropriate enforcement actions by any other federal, state, or local regulatory authority.
7. If any provision of this Order is found to be unenforceable for any reason, the remainder of the Order shall remain in full force and effect.
8. Howard Hughes shall be responsible for failure to comply with any of the terms and conditions of this Order unless compliance is made impossible by earthquake, flood, other acts of God, war, strike, or such other occurrence. Howard Hughes shall show that such circumstances were beyond its control and not due to a lack of good faith or diligence on its part. Howard Hughes shall notify the DEQ Regional Director verbally within 24 hours and in writing within three business days when circumstances are anticipated to occur, are occurring, or have occurred that may delay compliance or cause noncompliance with any requirement of the Order. Such notice shall set forth:
  - a. the reasons for the delay or noncompliance;

- b. the projected duration of any such delay or noncompliance;
- c. the measures taken and to be taken to prevent or minimize such delay or noncompliance; and
- d. the timetable by which such measures will be implemented and the date full compliance will be achieved.

Failure to so notify the Regional Director verbally within 24 hours and in writing within three business days, of learning of any condition above, which Howard Hughes intends to assert will result in the impossibility of compliance, shall constitute a waiver of any claim to inability to comply with a requirement of this Order. For purposes of this Order, verbal notification may be by voicemail and written notification may be by e-mail.


- 9. This Order is binding on the parties hereto, their successors in interest, designees and assigns, jointly and severally.
- 10. This Order shall become effective upon execution by both the Director or his designee and Howard Hughes. Nevertheless, Howard Hughes agrees to be bound by any compliance date which precedes the effective date of this Order.
- 11. This Order shall continue in effect until:
  - a. Howard Hughes petitions the Director or his designee to terminate the Order after it has completed all of the requirements of the Order and the Director or his designee approves the termination of the Order; or
  - b. the Director or Board terminates the Order in his or its sole discretion upon 30 days' written notice to Howard Hughes.

Termination of this Order, or any obligation imposed in this Order, shall not operate to relieve Howard Hughes from its obligation to comply with any statute, regulation, permit condition, other order, certificate, certification, standard, or requirement otherwise applicable.

- 12. Any plans, reports, schedules or specifications attached hereto or submitted by Howard Hughes and approved by the Department pursuant to this Order are incorporated into this Order. Any non-compliance with such approved documents shall be considered a violation of this Order.
- 13. The undersigned representative of Howard Hughes certifies that he or she is a responsible official authorized to enter into the terms and conditions of this Order and to execute and legally bind Howard Hughes to this document. Any documents to be submitted pursuant to this Order shall also be submitted by a responsible official of Howard Hughes.

14. This Order constitutes the entire agreement and understanding of the parties concerning settlement of the violations identified in Section C of this Order, and there are no representations, warranties, covenants, terms or conditions agreed upon between the parties other than those expressed in this Order.
15. By its signature below, Howard Hughes voluntarily agrees to the issuance of this Order.

And it is so ORDERED this 18<sup>th</sup> day of December, 2009.

  
\_\_\_\_\_  
Thomas A. Faha, Regional Director  
Department of Environmental Quality

------(Remainder of Page Intentionally Blank)-----

Howard Hughes Medical Institute voluntarily agrees to the issuance of this Order.

Date: 12/14/09 By: Craig A. Alexander, Vice President + General Counsel  
(Person) (Title)

State of Maryland  
Commonwealth of Virginia  
City/County of Prince Georges

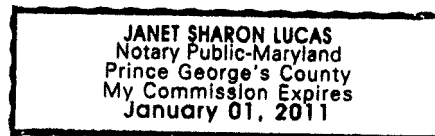
The foregoing document was signed and acknowledged before me this 14<sup>th</sup> day of  
December, 2009, by CRAG A ALEXANDER who is  
VICE PRESIDENT + GENERAL COUNSEL of Howard Hughes Medical Institute, on behalf of the  
Institute.

Janet Sharon Lucas  
Notary Public

Registration No. \_\_\_\_\_

My commission expires: 1-1-2011

Notary seal:





## **APPENDIX A SCHEDULE OF COMPLIANCE**

### **Howard Hughes shall:**

1. Operate the facility and associated equipment in compliance with the Permit.
2. Within 60 days of the execution of this Order, submit to DEQ an Air Permit Application (Form 7) or its equivalent, reflecting the operational processes at the facility including the current fuel source for the Generac generators.
3. Maintain records at the Facility sufficient to calculate monthly and annual emissions including fuel usage, production values, maintenance logs, and operator training and make these records available for inspection by DEQ upon request.